



City of Broomfield

ONE DESCOMBES DRIVE

BROOMFIELD, CO 80020

(303) 469-3301

February 5, 2001

Dyan Foss
Kaiser-Hill, L. L. C.
Rocky Flats Environmental Technology Site
10808 Highway 93, B130
Golden, CO 80403-8200

Re: Building 371/374 Closure Project Decommissioning Operations Plan

Dear Ms. Foss:

The City of Broomfield appreciates the opportunity to review and comment on the Building 371/374 Closure Project Decommissioning Operations Plan (DOP), dated December 20, 2000. Broomfield considers the 371/374 DOP a document that should be inclusive of explicit decommissioning and demolition activities, which may have the potential to impact human health and the environment both on-site and off-site. The City staff has very thoughtfully and thoroughly reviewed this crucial document and has both general and specific concerns associated with the document.

Broomfield is disturbed that similar issues and concerns identified with previous Decommissioning and Demolition (D&D) documents have not been adequately addressed to protect human health and the environment both short-term and long-term. There remains a significant amount of uncertainty related to the use of explosives, air monitoring, water management, under building contamination (UBC), removal of old process waste lines (OPWL), and the proposed changes for the disposition of concrete rubble.

In accordance with paragraph 107 of the Rocky Flats Cleanup Agreement (RFCA), a public comment period shall be no less than 45 days and no more than 60 days. Due to the significant amount of documents Broomfield was reviewing in one time period, we requested on several occasions to have the comment period extended to 60 days to allow for an enhanced review of the document. The City is not clear as to why we were not given the extended 15-day comment period to review the 371/374 DOP. The necessity to rush to have such a crucial document approved is not clear considering the demolition of the facility is not scheduled until the year 2005.



1/8
DOCUMENT CLASSIFICATION
REVIEW WAIVER PER
CLASSIFICATION OFFICE

ADMIN RECORD

B371-A-000020

Use of Explosives

The City of Broomfield is extremely concerned with the planned use of explosives for any D&D activity. City staff has been vocal with their concerns and commented on other D&D documents about the use of explosives and the potential for their "routine use." Kaiser-Hill originally stated the use of explosives would only be utilized with the demolition of the 771 stack, thus the need to incorporate explosives in the *Facility Disposition RFCA Standard Operating Protocol (RSOP)*. The City is now being informed through other D&D draft documents of the potential use of explosives on the 707, 771, and 371 facilities. The City commends Kaiser-Hill for the additional detail of information related to the use of explosives within the 371/374 DOP, but City staff has not received sufficient information on the methodology to make an informed decision. Broomfield recognizes explosives are used routinely in the demolition industry, but the potential to release radioactive or chemical airborne particulates is not part of a routine demolition activity. With the physical construction of the 371 facility, the 371 DOP reflects extensive use of explosives and does not offer any alternative plans. The City of Broomfield cannot support the use of explosives at this time. Additional information needs to be provided regarding: (1) the situation in which explosives will be used, (2) reasoning why explosives should be used instead of other demolition methods, (3) agreement that the use of explosives will only be on "free-release" facilities, (4) use of explosives at other DOE Sites on facilities which were contaminated with plutonium or americium, and (5) methodologies to be used to prevent the release and control of airborne contamination and fugitive dust. Broomfield requests more dialogue related to the justification for the use of explosives. Without this additional information, Broomfield will object strongly to any use of explosives.

Air Monitoring

The City of Broomfield requests enhanced air monitoring be performed during demolition of facilities to ensure there are no elevated releases of contaminants to the environment. Broomfield has voiced its concern with this matter and has had the same concern with previous D&D documents. In addition, Broomfield is concerned with the potential for release of emissions of radionuclides to the environment during the removal of contaminated portions of a structure. Broomfield requests enhanced air monitoring be performed during demolition of facilities and during the removal of contaminated sections of a facility. The assumption within the 371 DOP is the facility will be free-released and does not address the need to remove contaminated sections of the facility. The City is not confident the canyons or the stacker-retriever will be decontaminated to meet the free-release criteria. Removal of contaminated portions of a structure is not even addressed within the 371 DOP, and this activity is crucial for free-releasing a facility so the *Facility Demolition RSOP* can be utilized. In addition, the City is concerned that scabbled concrete that has been free-released may still contain contamination that may leach out or be released during demolition activities. Broomfield requests the Integrated Monitoring Plan be revised as soon as possible to reflect the requirement of additional project-specific air monitoring during demolition activities.

Water Management

Broomfield continues to be concerned with the work planning and execution of protecting surface water from contaminated groundwater within the area. The DOP states Environmental

Restoration (ER) will begin remediation of soils, groundwater, and surface water contaminated as a result of building operations. The DOP does not address the potential to encounter contaminated groundwater within this area or the contaminants of concern. The 371 DOP is not specific enough to address the potential degradation of surface water. The "Surface Water Management Practices" section is generic to the site and not explicit to the 371 project. If the specific constituents of concern and groundwater plumes are known, they should be addressed within the plan. In addition, the plan does not address how run-on and run-off will be addressed when areas are being remediated with deep excavations and are adjacent to contaminated areas that will not be cleaned-up until a much later date.

Under Building Contamination

Broomfield is concerned with the proposed actions and generic detail related to the removal of UBC and the placement of soils below Tier 1 action levels back into the excavation area. The project approach needs to be more clearly identified. Placement of soils with volatile organics back into excavation areas which may impact groundwater and/or surface water is a subject requiring more dialogue with stakeholders. Of all the proposed D&D documents, the 371 DOP has triggered additional concerns related to long-term stewardship and potential negative ramifications due to the extent of building sections that extend 40 feet below grade. Broomfield requests additional alternatives be provided to the regulators and stakeholders as to how K-H plans to address UBC removal. In addition, the City requests the following additional information regarding UBC removal: (1) the process for removing UBC at depths well below three foot of grade, (2) disposition of concrete generated from the facility demolition, (3) impacts to groundwater and surface water, (4) identified water management controls associated with such large voids, (5) placement of backfill material into voids and compaction requirements, (6) verification process and independent verification process for UBC, (7) health and safety issues associated with deep excavations and, (8) identified OSHA requirements associated with the excavations. Broomfield requests additional detailed information regarding placement and compaction methodologies so we may forward the information to our Engineers for review and comment.

Old Process Waste Lines (OPWLs)

The City requests more dialogue with you, the regulators, and other stakeholders to address concerns associated with the disposition of OPWLs. It needs to be clearly identified if process lines will be left in place or removed during D&D activities. At what point will D&D remove these lines? Will all lines within the facility structure be removed and at what depth?

Disposition of Concrete Rubble

The City does not agree with the exception to the RSOP for Recycling Concrete, which will eliminate the need to stockpile and size reduce the concrete. The proposed change clearly does not identify the size of the rubble, compaction method, and material that will be used to compact soils around the large pieces of concrete. How will subsidence issues be addressed? How will the QA/QC compaction requirements be performed and documented, considering the proposed plan? What are the potential water pathways that may be created with the proposed plan? There are several potential negative impacts this proposal may have to meet the engineering subsidence

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criteria. Broomfield also objected to the 771 DOP exceptions to the RSOP for Recycling Concrete. Broomfield requests more detailed information on the exceptions to the RSOP so we may forward the information to our Engineers for review and comment.

Environmental Stewardship

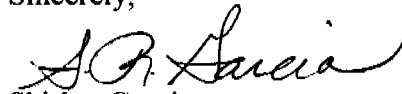
Environmental consequences for the D&D activities have been referred to in other documents such as the RSOP for Facility Component Removal, Size Reduction, and Decontamination and the RSOP for Facility Disposition. These documents do not address the environmental consequences of long-term stewardship. The 771 DOP and 371 DOP have clearly identified remedial activities that will require stewardship analysis and future cleanup decisions. With residual contamination and related risks, the 371 DOP does not incorporate the inherent uncertainties associated with its demolition approach.

Finally, Broomfield would like to commend Kaiser-Hill on the specific methodologies and plans for mobilization, site preparation, and demobilization for the 371 project. Similar plans should be incorporated into all the other DOP documents.

In addition to these general comments, comments for specific sections of the 371 DOP are provided in the attachment.

Thank you for the opportunity to comment on this crucial document. The City of Broomfield expects that we will continue to be involved, informed, and allowed to participate in the revisions to the 371 DOP. If you have any questions, please feel free to call Kathy Schnoor at 303-438-6363 or me at 303-438-6329.

Sincerely,



Shirley Garcia
Environmental Services

Attachment

Pc: Hank Stovall, Broomfield City Council
Mike Bartleson, City of Broomfield
Kathy Schnoor, City of Broomfield
Jeff Stevens, Kaiser-Hill Company
Steve Gunderson, CDPHE
Steve Tarlton, CDPHE
James Hindman, CDPHE
Tim Rehder, EPA
Mark Aguilar, EPA
David Abelson, RFCLOG
Ken Korkia, RFCAB

Attachment

Additional Section-Specific Comments provided by the City of Broomfield for the 371 DOP dated December 20, 2000

1. Page 1, Executive Summary, ¶ 6

Broomfield understands the type of operations that occurred within Building 374, but does not agree with the typing of the facility as a Type 2 facility. Building 371 and 374 should be typed as a "Type 3" facility because they are one contiguous facility.

2. Page 9, 2. Facility Description

See # 1.

3. Page 17, Project Approach

Broomfield is concerned significant changes to the DOP will not involve a modification to the DOP, therefore there will be no opportunity for public input. When there is a significant change to the DOP, Broomfield requests DOE and K-H keep them informed of the proposed changes prior to the implementation of the revised activities.

4. Page 22, 4.2.4 Pre-Demolition Survey

Per revisions to the 771 DOP, the independent verification (IV) of "typically 5%" was removed and revised to state the percentage will be based on the regulators' criteria. The type of facility and degree of contamination within the facility will dictate the percentage of IV performed.

5. Page 22, 4.3 Dismantlement Sets and Decommissioning Areas

Broomfield is concerned with the use of the checklist being used for the entire facility. Each set or area should have its own checklist to ensure all decontamination and decommissioning activities are addressed on the checklist. The checklist is not even mentioned in this section.

6. Page 33, 4.4 Facility Component Removal, Size Reduction, and Decontamination, ¶ 1

Broomfield disagrees with the statement "as long as the activity remains within the scope of the *RSOP for Facility Component Removal, Size Reduction, and Decontamination Activities*, this DOP will not be revised." Broomfield has expressed concerns with the use of explosives in the mentioned RSOP document. If explosives are to be used in Building 371, the City strongly believes the DOP needs to be modified to include the specific plans associated with use of explosives and stakeholders should be apprised of the planned activities.

7. Page 34, 4.4.1 Removal of Ventilation and Filtration Systems, ¶ 1

The document states “due to the potential for radiological and/or chemical contamination with the ventilation systems ductwork, there is the possibility for releases of hazardous and/or radioactive materials to the environments.” The risks will be removed if containments are constructed to control the release of hazardous and/or radioactive materials. Broomfield reiterates the purpose of the 371 DOP is to address planning and implementation of controls to ensure protection of human health and the environment. Construction of containments will ensure releases are controlled and contained.

8. Page 34, 4.4.1 Removal of Ventilation and Filtration Systems, ¶ 2

The City is very concerned with the application of fixative coatings to ventilation systems with reduced ventilation or no ventilation at all. This proposed activity will increase the potential for the release of airborne contaminants to the environment, especially if there is no containment structure. The DOP assumes the use of containments will be minimal for Zone I and Zone IA systems. Proper planning should include the use of containment structures for Zone I and Zone IA ventilation systems within Building 371.

9. Page 38, 4.4.2 Removal of the Centralized Storage Vault (CSV)

Broomfield is concerned with the planning related to the removal of the CSV, known as the stacker-retriever, and the associated safety and decommissioning activities. Introduction of a man-lift, which will become radioactive waste, may not be the best plan for the CSV. Broomfield is also concerned when ventilation of the CSV will be reduced during fogging while decontamination operations are occurring within the repair bay of the CSV. The document states “manned entry to the CSV will be performed in air purifying respirators.” How will the contamination levels be measured prior to entry to ensure the respirators are adequate to protect the workers?

Broomfield requests more dialogue addressing the specially engineered winch system and the planning of the removal of the racks utilizing plasma arc or mechanical cutting.

The DOP states decontamination will be performed until surface areas meet the applicable unrestricted release criteria described in the *RSOP for Facility Component Removal, Size Reduction, and Decontamination Activities*. If the CSV cannot be free-released, what are the alternative plans?

10. Page 45, 4.5 Facility Demolition

Broomfield strongly objects with the proposed method of demolition of the 371 facility. The DOP states: “as long as the activity remains within the scope of the *RSOP for Facility Disposition*, this DOP will not be modified.” Broomfield voiced

strong objections to the use of explosives during the public comment period for the RSOP for Facility Disposition. The City has requested additional information on the use of explosives to make a more knowledgeable decision.

On page 46, completion of the 371/374 structure demolition will be made by using tracked equipment to remove remnant wall and foundation items to a depth at least three (3) foot of grade. The majority of the 371/374 is well below three (3) foot of grade and Broomfield does not agree with the DOP's proposed plan to implode the structure and use the concrete material as fill without the material being size reduced or adequately compacted to prevent subsidence or create additional water pathways. The DOP does not provide any alternative methods for demolition of the structure. Broomfield requests additional methods be incorporated into the DOP to ensure stewardship is an integral part of the remedy selection and meets stewardship long-term goals and objectives. Broomfield agrees characterization and removal of UBC should be an integral part of facility D&D activities, because the facility can act as containment during the removal of contaminated UBC. However, Broomfield does not agree with the plan to just bulldoze the facility into the sub-basement void without any analysis of the ramifications to long-term stewardship. The concrete material should be processed to meet the three-inch minus criteria. A temporary concrete crusher should be utilized at the site to meet the criteria of the *Concrete Recycling RSOP*.

Page 54, items # 5 and # 6. The suggestion that someone on a bulldozer will make a hole in the basement wall to access the imploded material to compact the material seems extremely unsafe. It will be impossible to ensure all the concrete and void material is compacted. What will the QA/QC protocol be for ensuring the compaction requirements have been met and how will they be documented?

Page 54, note 17, states a clay-based soil will be used to bridge the fill material and the concrete. Please provide engineering calculations and methodologies of this proposed activity, so we may forward it our Engineering Department for review and comment.

11. Page 56, Table 6. Building 371/374 Closure Project Waste and Recyclable Material Estimates

What are the treatment/disposal plans for waste when the 374 treatment unit is no longer in service? With the sequence of events, LLW liquids may still be generated after 374 has been decommissioned. Will a temporary unit be on-site to treat the waste?

12. Page 69, Applicable Or Relevant and Appropriate Requirements (ARARs)

The 371/374 DOP has proposed activities that were not envisioned within the *RSOP for Facility Component Removal, Size Reduction, and Decontamination Activities* and

the *RSOP for Facility Disposition*. The ARARs should be included within the 371/374 DOP.

13. Page 71, 8.0 Environmental Consequences

The 371/374 DOP has proposed activities that were not envisioned within the *RSOP for Facility Component Removal, Size Reduction, and Decontamination Activities* and the *RSOP for Facility Disposition*. Residual contamination is one of the biggest concerns addressing the environmental consequences associated with soils and geology. The 371 DOP does not address this issue. Air and water qualities are also not addressed with the proposed changes to meet the National Environmental Policy Act (NEPA) impact analysis. The proposed changes need to be included within the NEPA analysis and added to the 371/374 DOP.

Human health and safety, ecological impacts and cumulative effects resulting from the project's activities need to be defined along with associated adverse effects. The short-term uses versus long-term uses are not adequately addressed within the previously mentioned D&D activities because they state the D&D activities will not result in a change in land or resource use.

14. Appendix A – Building 371/374 RCRA-Regulated Units

The CSV/stacker-retriever is not listed in the appendix. I thought the CSV/stacker-retriever was a permitted unit. The unit is not listed in Appendix A. What are the associated EPA codes?

15. Appendix B Building 371/374 RCRA Unit-Closure Information Sheets

The document states, "Further RSOPs that address waste disposal will be utilized." What RSOPs is this document referring to? Please identify any new documents DOE envisions will be necessary in the future for waste disposal. Clarify what this statement means. Broomfield is opposed to any waste being disposed of on-site.

16. Attached maps

The document does not address the attached 78 maps and what they are. The pages are not numbered, nor do they identify the room locations. Please provide the needed information associated with the attached maps so Broomfield may adequately review the maps and provide comments or questions related to the tanks and/or valves.